

SCI-TECH NEWS

The Official Bulletin of the

SCIENCE-TECHNOLOGY DIVISION
SPECIAL LIBRARIES ASSOCIATION

Chemistry • Engineering • Paper & Textiles • Petroleum • Pharmaceutical • Public Utilities

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INFORMATION SECURITY AND THE LIBRARIAN

Librarians have said and written less about the impact of the security program on their profession than any other problem which they have experienced. Conferences, books, journal issues, and informal discussions have been devoted to information retrieval, cataloging theory, the status of the profession, personnel problems, buildings, microreproductions, copyright, and every other thorn that has intruded the librarian's consciousness. But on the security problem the librarian and information officer are strangely silent — at least in public.

The implications of the security problem are not limited to those librarians working for Department of Defense agencies and their contractors. Any librarian who has ever had a use for information produced by an agency working in a classified area, whether the information was classified or not, has been affected by the security program. Probably every member of the Science-Technology Division, directly or indirectly, knowingly or unconsciously, has been subjected to the influence of the security problem.

The necessity of an information security program is not subject to argument. It is obvious that the deployment of troops on a battlefield and the capabilities of the weapons assigned them should not be released to the opposing forces. Even a chess player in a friendly game does not tell his opponent which moves he plans to make.

The implementation of the program, however, should be given some careful consideration. The objective of the security program is to protect the lead time held by our country in the development of a weapons system or a research program so that in unfriendly, international competition we may maintain or extend our advantage.

The compartmentation principle, the "need to know" limitation, was devised to

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achieve this protection. This principle was diligently exercised in two areas in which the United States once held unquestioned supremacy: nuclear energy and aeronautics. This supremacy is no longer unchallenged.

Compartmenting information and releasing it only to those who possess the "need to know" protects information but it also curbs the free interchange among the members of the scientific community. Progress in research depends upon this free interchange. To what extent is this curb on the free interchange of scientific information responsible for our decline from eminence, and to what extent are other factors responsible?

This is not an unconsidered plea to discard all security protection on the information we produce. Security and dissemination restrictions are necessary, rational and based on legal requirements. But the librarian or information officer has a responsibility to the profession to consider and investigate those problems which the program imposes on the information activity.

Problems which merit investigation include the adequacy of our distribution system within the security and proprietary limitations, the system under which information is classified and the methods and procedures of declassification review. Space in SCI-TECH NEWS is available for concise, well presented studies in these areas.

SCI-TECH NEWS

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FROM SCI-TECH'S CHAIRMAN

There is no unanimity among librarians in their concept or understanding of work standards. There are many conflicting viewpoints as to what is meant by the term as well as a lack of agreement relative to the need for and the application of such standards in special libraries.

The Division Relations Committee has planned a General Session at the 50th Anniversary Convention in Atlantic City, Tuesday afternoon, June 2, 1959 at which the topic will be considered. The stage will be set at the opening of the meeting for subsequent discussion by a 10-15 minute talk. The general session will then disperse by Divisions to separate rooms to continue the discussion.

Each Division will break up into smaller groups of 15-20 members with a previously appointed moderator to stimulate and encourage participation in the discussion by all members of the group. There will also be a secretary to record comments and any conclusions the group may reach.

There is no expectation of developing standards during the discussion. As a matter of fact, this would be undesirable because the preparation of a standard should be carefully done after considerable study. The discussion can serve, however, as a starting point for continued study and later development of standards of performance for special librarians.

While the moderators will be briefed in a special Sunday evening meeting to obtain the maximum amount of discussion from the participants, members will be well advised to do some preliminary thinking.

Should standards be devised for quantity performance or only quality performance?

Should a library supervisor be concerned only with the adequacy of the cataloging of books and reports or can a production standard be established? Can standards be devised only for the person-to-thing relationship or can they also apply to the person-to-person relationship?

If standards are devised how can they be used? In evaluation of a librarian's performance? In budget estimating? In evaluating the efficiency of the library operation?

Prepared participants will be as important to the success of the General Session as the moderators. Begin thinking now to make your time at the 50th Anniversary Convention profitable.

Louis Brock, Chairman
Science-Technology Division

PACIFIC AERONAUTICAL LIBRARY

The Pacific Aeronautical Library was established in 1941 to act as a co-operative library, augmenting the services of the engineering libraries of the five major aircraft companies in the Los Angeles area, and saving duplication of both materials and time. It operates under the auspices of the Institute of the Aeronautical Sciences, as an autonomous unit, being entirely supported by the charges for service to its subscribing companies.

The collection of books, reports and periodicals is built with two things in mind: to keep the collection a good, well rounded one in the field of science now covered by aeronautical research, and to save the individual libraries the necessity of buying in the peripheral fields. A good collection of indexes and other bibliographical tools is also maintained. The library acts as a depository for materials not in constant use at the plants, thus saving valuable space for the plant libraries. Service is channeled through the library units of the subscribing plants. There is station wagon delivery and pick up twice a week. In order to fill requests for material not held by PAL, a staff member goes once a week to both the Los Angeles Public Library and the University of California at Los Angeles to check their catalogs. We also enjoy very liberal interlibrary loan privileges with California Institute of Technology, University of Southern California and some of the larger government agencies in the area. At UCLA we employ student help to do the actual pick up and charge out of all material borrowed, to relieve the University library staff of as much work as possible. Our driver picks up and returns material borrowed from all local libraries. The Paul Kollsman Library of the

IAS Headquarters in New York is a valuable source of loan material also, particularly in the field of foreign reports received by them on an exchange basis.

When material is not held locally, we get photostats for the plants, using the New York Public Library, the Library of Congress and John Crerar Libraries mainly for this service.

As a cooperative library, we received the microfilms of the captured German documents collected by CADO, and the translations made by them. We also set up the catalog covering these documents. The microcarded reports sent out by the Technical Information Division of L. C. are also held here, and a large collection of OSRD reports were obtained through the Office of Naval Research. We also have a collection of the ASTIA unclassified microcarded reports, complete up to the time they discontinued all automatic distribution.

One of the services requested by the major plants when the library was established was a periodical index. The index was first produced as a card index, sets of cards for each article indexed being provided to subscribers. A card service for the NACA TRs, TNs and TMs, the British Reports and Memoranda, and the preprints of various technical societies is provided.

In 1955 we started doing the periodical index by the Uniterm coordinate method, cumulating this quarterly as a desk volume. The Uniterm index has been very well received, and goes to a good many foreign countries as well as to companies and universities in the United States and Canada.

In addition to the index, a check list of periodical articles, arranged in rough subject grouping is issued twice a week and sent to subscribing plants in large quantities for distribution to their engineering personnel. This list also includes new reports, preprints and books received.

Meetings of the plant librarians are held periodically to discuss common problems, and special meetings are held for special visitors. The IAS Building has a large auditorium as well as a conference room, and is as centrally located as anything can be in this far flung area, which makes it a good meeting place.

The library acts as unofficial advisor to the smaller plants, particularly in the case of those not having any library as such. It is helpful to the person in charge to come to PAL and see how standard library procedures can be adapted, and to familiarize themselves with standard library forms. When the company feels the need of setting up its library on a professional basis, it is helpful

to management to come and discuss the problems involved, and to see how the Uniterm index compares with the conventional catalog.

Eighteen years operation has proved the value of the cooperative idea for this area. It should work out very well for experiments in mechanized storage and retrieval, and close touch is maintained with developments in this field. From serving five plants, we now serve sixty five. Our users include the aircraft industry, electronics, instrument and computing firms. The growth in service has come about with no planned publicity, as a result of providing a needed service to the best of our ability.

Nell Steinmetz
Librarian

GENEVA CONFERENCE ON UTILIZATION OF ATOMIC ENERGY SCIENTIFIC AND TECHNICAL INFORMATION

During the last week of May representatives of the U. S. AEC Technical Information Service (TIS) met in Geneva, Switzerland with a group of European librarians who had depository collections of AEC documents. This meeting was a combination workshop and conference on problems of mutual interest. But, beyond the specialized needs of the AEC and the European atomic energy establishments, decisions were reached and agreements were worked out which are important for American documentation and librarianship in general.

One of the basic problems of documentation is the availability of reports and other research materials. The crux of the matter is that such documents are printed only in small quantities and are usually not available through any commercial or public source. Almost from the beginning, the AEC realized its responsibility for making its reports available to the scientific community. Through public sale, now handled by the Office of Technical Services, and through a system of depository libraries, all unclassified AEC reports have been made available. Through Nuclear Science Abstracts bibliographic control has been established and an announcement medium provided so that everyone might know what was available and where it could be obtained.

Being responsible for the provision of scientific and technical information to the AEC research scientists, the Technical Information Service of the AEC developed special acquisition programs. As the knowledge of atomic energy spread throughout the world, the problem of getting everything of importance in the field became more complex and

more difficult. Fortunately, having the AEC generated reports, the Technical Information Service was in a position to develop a flourishing exchange program. When, in addition, the President's Atoms-for-Peace program was established which provided for a depository of AEC reports in foreign countries, the TIS was able to work out formal agreements for the acquisition of non-U. S. reports and publications.

In September 1956 the information officers of the European Atomic Energy Society met at Saclay, France. The main purposes of this meeting were to organize a system for the exchange of information and to set up some form of bibliographic control. The AEC already had working agreements with the major European atomic energy establishments such as France, the United Kingdom, Belgium, etc. Their reports were all being sent to TIS and were being abstracted in NSA. The Europeans decided, therefore, that, rather than start a new abstract journal or announcement bulletin, each establishment would send its publications to TIS for listing and abstracting in NSA.

Thus the AEC was receiving most of the important report literature in the field of atomic energy. During the last few years, however, almost every country has started an atomic energy program and has begun to generate information. By the end of 1957 it was quite obvious that the previous informal agreements for exchange and the voluntary contributions of a few European countries were not enough to assure complete coverage of the literature. Furthermore, with the establishment of depositories of AEC reports in foreign countries many of the librarians were writing and visiting the AEC in order to work out the best means for utilizing the collections. The end result was the Geneva Conference of May 26-29, 1958. In attendance were librarians and information specialists from Austria, Belgium, Denmark, France, Germany, Israel, Italy, the Netherlands, Norway, Spain, Sweden, Switzerland, the United Kingdom, and such international agencies as the European Organization for Nuclear Research (CERN), the European Coal and Steel Authority, Euratom, the International Atomic Energy Agency, the Organization for European Economic Cooperation and the United Nations. The TIS representatives were Melvin S. Day, Bernard M. Fry and I. Albert Warheit.

All the participants agreed to the complete exchange of their scientific and technical reports. NSA would abstract and index all such materials immediately upon receipt. Li-

brary acquisition lists and local announcement bulletins would be exchanged so that each recipient could effectively monitor the literature. Each official depository would be responsible for the atomic energy report literature of its country no matter what its source. Each depository also would be responsible for supplying atomic energy information to its nationals. This meant TIS would supply all of the U. S. depositories copies of all foreign reports in order to make full scale U. S. distribution.

The new international atomic energy organizations, as part of their information services, were interested in developing library or bibliographic services on a broad scale. However there was very strong opposition to the development of duplicate tools. *Nuclear Science Abstracts* was to be the medium by which all scientific and technical information of primary interest to atomic energy was to be abstracted and indexed. It was strongly recommended that the international organizations try to develop review journals or abstract journals covering the legislative, fiscal, and regulatory aspects of atomic energy. TIS on its part promised to broaden its coverage of the published literature. In 1957, for example, NSA printed 13,563 abstracts. In 1958 there were 17,960 abstracts. The total for 1959 will probably reach 24,000. Also, details are now being worked out to get abstracts prepared by the Euratom countries of their own literature and to airmail these to the U. S. in order to speed up the appearance of the abstracts. This cooperation will feed into NSA not only the primary report materials, but also journal articles, patents, dissertations and other monographs.

Included also in agreements for cooperation were the translations prepared by the various organizations. Copies of these are being furnished the SLA Translation Center at the John Crerar Library and to OTS for deposit at the Library of Congress. An interesting residue are a number of translations into French which OTS is not ready yet to accept and which are, therefore, being retained in Oak Ridge.

One of the interesting developments at the Conference was the attempt to work out some agreement for the adoption of a classification scheme. The United Kingdom and CERN in Geneva used the Universal Decimal System (UDC). The Swiss Federal Institute of Technology Library had a special expansion of UDC to take care of the rapidly changing atomic energy information. The French had a very detailed multi-dimensional special classification scheme with a very simple notation

which would lend itself to machine coding. The Spaniards had adopted the French scheme with certain modifications. With the Americans remaining completely neutral, the various European participants presented briefs for their schemes. All recognized the difficulty in trying to keep a classification scheme up to date, especially for a rapidly developing science and technology such as atomic energy. International organizations like CERN pointed out the utility of classification schemes which were independent of language. However no agreement could be reached and when the Euratom countries sat down to work out their standard, they dropped all classification schemes in favor of subject headings. The Gmelin Institute, for example, compared its subject headings with those used by NSA and found that over 90% of the headings were identical. The differences were minor and could be easily adjusted. What is needed are adequate concordances so that the subject headings can be effectively used in the various languages. Actually, in the case of atomic energy, where the dependence on English literature is still very large, knowledge of English is widespread and the language problem is less acute. An additional factor is the availability of a printed bibliographic tool, **Nuclear Science Abstracts**, which makes it possible for a library to dispense with internal cataloging of reports and journals. This becomes especially effective now that NSA has complete indexes in each issue and cumulates these quarterly, semi-annually and annually.

There were many secondary benefits derived from the Conference which do not appear in the minutes. The contacts made between the various representatives have greatly stimulated the interchange of information. The flow of documents between the organizations has been stepped up. Everyone came away with ideas for improved techniques, modern methods and procedures, but these are the benefits of almost every professional conference. What was unique and important in the Geneva conference was that the mechanics were worked out for making a whole literature available to the world. Here were responsible individuals interested in obtaining for their clientele a literature which, in the main, could not be purchased. Information exchanges on a person-to-person basis could take care of only immediate needs. However, by assuming responsibility on a national scale, the whole scientific community benefits. The lesson for other disciplines is obvious. This is one of the great tasks the

new Science Information Service of the National Science Foundation has set for itself.

I. A. WARHEIT
Technical Information Service
Atomic Energy Commission

ABSTRACTING COST STUDIES

Some cost studies recently completed by the American Society for Metals covering production of the ASM Review of Metal Literature are entered in the following tabulation in a form which might be useful to librarians who prepare or contemplate preparing an abstract bulletin. A few notes of explanation will help in understanding these figures.

The ASM Review of Metal Literature is an abstracting service in which the abstracts are of the brief, indicative type — perhaps better known as "annotations." The work of preparing the abstracts is done under contract to the Center for Documentation and Communication Research at Western Research University. The contract calls for approximately 12,000 documents to be scanned, with roughly 8,000 to be annotated, indexed and classified, and 4,000 to be presented as title listings only, also indexed and classified. The total cost, as shown in item I, is \$24,900 — a unit cost of \$2.59 for an annotation and \$1.05 for a title listing.

This does not represent the total cost of preparing the abstract, however, since editorial and supervisory functions are carried at ASM headquarters as shown in item II. Editorial salaries include a portion of the time of two persons. Postage and stationery includes printed forms on which the abstracts are typed. The item for subscriptions covers 220 journals (a small portion of these being received on a complimentary or exchange basis) which devote their primary attention to metals and metallurgy. It should be noted that this is by no means the complete coverage, since about 2,500 "fringe" journals are scanned at the John Crerar Library in Chicago, and pertinent articles are microfilmed and sent to Western Reserve University for abstracting; the expense of this service is included in the University contract.

The unit cost for editorial work and administration is therefore \$.44, making a total of preparation cost \$3.03 per annotation and \$1.49 per title listing.

Item III is probably of small interest because it will vary so greatly depending on quantity, distribution and method of printing. It might be noted in passing that a saving of something like \$36,000 has recently been effected at ASM headquarters by going from letterpress to photo-offset printing and reduc-

ing our distribution list (free) from all 31,000 members of the Society to the 5,000 members who have specifically requested the service.

Something should be said in explanation of "title listings." These are used only when the title (usually a relatively unimportant article from the bibliographic standpoint) is sufficiently indicative of the content of the article that a short annotation would merely become a paraphrase of the title. The figures show that the use of title listings considerably reduce the cost of abstract preparation. It also represents a great economy in printing costs because of the saving in space. For example, in 1957, 8,219 items were published, all of them being annotations with no title listings; in 1958, 11,772 items were published, with about a third of them title listings. This represents a 43% increase in number of documents, but the number of pages required to print the abstracts was increased only 25%.

Finally, it should be noted that the cost of \$.75 per title listing represents more than the cost of typing out the reference, since the article must be scanned and understood to make sure it does not require an annotation, and it must also be indexed and classified.

Cost of Review of Metal Literature, Calendar 1959, 12,000 Abstracts

I. Expenses at WRU

1. Preparing of 8,000 annotations (Including Crerar Searching and microfilm)	\$18,300		
2. Preparation of 4,000 title listings	3,000	\$	2.29
3. Indexing and classifying (12,000)	3,600		.75
	\$24,900	(A)*	2.59
		(T)*	1.05

II. Editorial and Administration Expense at ASM

1. Editorial salaries	3,340		
2. Postage, station- ery, etc.	480		
3. Travel	360		
4. Overhead	475		
5. Subscriptions	575		
	5,230		.44
TOTAL Preparation Cost	30,130	(A)	3.03
		(T)	1.49

III. Printing and Distribution (5,000 copies)

1. Composition	5,472		
2. Printing, binding, mailing	9,204		
3. Addressographing labels	15		
4. Postage	500		
TOTAL Cost of Abstracting Service	15,191	**	1.27
	45,321	**	3.78

* A - Annotation... T - title listing.

** Averaged for 12,000 items, with no distinction between annotations and title listings.

MARJORIE R. HYSLOP

Editor, ASM Review of Metal Literature

THE MAIL BAG

The request for two copies of the summer issue of *Sci-Tech News* which we carried on the first page of the winter issue was filled many times over. The response was most heart warming and we want to thank each of you who replied.

DR. POWELL ON READING

Alberta L. Brown, Past President SLA:

Man from earliest times has attempted to communicate with his fellow men and to leave a record of his civilization to posterity. Our ancestors cut these into stone; later peoples used papyrus and hand written manuscripts; but it was not until the invention of printing that the book, as we know it, came into existence. No doubt each era tended to hold its particular form of communication sacrosanct. No one could deny that today the book is our most important single record of civilization as well as one of the bases of that civilization.

I would like to take issue, however, with Dr. Powell on one of his statements, i. e., "Books are our best commodity because a good book is timeless," etc. I am willing to agree that good books are one of our best commodities, but only some books are timeless; and, in proportion to the number published over the years the percentage of timeless books is very small. Twenty years ago a doctor treating a patient for pneumonia could do little more than wait for the crisis and hope for the best. Today, because of an obscure article buried in a periodical, pneumonia is seldom fatal. The medical book of only twenty years ago is not timeless, it is merely out-of-date.

This situation is often true of books in the sciences generally, and the librarian serving in any of the scientific fields must avail himself of the total literature in whatever form it may be produced; whether it be a report, a symposium or a book. Actually, the published book may be years behind a special report or the outline of a round table discussion.

I agree with Dr. Powell when he mentions our speaking in dialects. Yehoshua Bar-Hillel, in *American Documentation* (Vol. 8, 1957, p. 104), says: "The inclination to seek a remedy for the present unsatisfactory situation of information searching by 'going to the fundamentals' seems to have been reinforced by the use of certain fashionable phrases and slogans that sound appealing as long as their vagueness and lack of clarity is not exposed."

The ideal person today is one whose interests range over a wide field of knowledge

and whose intellectual involvements embrace not only the world of books but include the enjoyment of music, the arts, the beauties of the out-of-doors, etc. Special librarians seem to me to be no different from other librarians or from other professional people in general in the matter of personal cultural interests. But there is a great gulf between the "timeless" book and the specific knowledge necessary for the administration of a scientific or technical library. This does not mean that the person who spends his day working in one of the highly specialized fields, such as atomic physics or pharmaceutical chemistry, neither understands nor is interested in the latest winner of the Nobel prize for literature and the economic and social life of the country in which he had the misfortune to be born.

Attending a convention, often at the expense of the employer, is not an opportunity to visit with old friends or to enjoy discussions of great books (though social hours may and do provide such opportunities) but rather a meeting of scientific and technical minds for the purpose of discussion and possibly the solving of mutual technical problems. We may and probably do enjoy Aristotle and Plato, Shakespeare and Yeats but we go to our annual convention for an entirely different purpose, not in any way connected with the writings of these great mental giants.

As any profession grows it passes through successive stages, one of which is the development of specialists within the group; however, the special librarian remains in the main stream of librarianship.

Gundrum M. Huden, Shulton, Inc.:

I am writing in response to Dr. Powell's disturbing letter. Though I share his misgivings, I feel that his approach to a very real problem is one that can only culminate in defeat. The following response briefly sets forth my point of view.

T. S. Eliot once wrote: "Culture may even be described simply as that which makes life worth living. And it is what justifies other peoples and other generations in saying, when they contemplate the remains and the influence of an extinct civilization, that it was **worth while** for that culture to have existed." Eliot was quite pessimistic, perhaps with much perception. Dr. Powell seems to be neither as pessimistic nor as perceptive. Dr. Powell would call back those who are heading for the far horizons of knowledge, call them back to what is basic, is true, is in a way central to our lives. My own conviction is, that while Dr. Powell sets excellent criteria of worth, he fails to see the obvious direction

in which to seek their fulfillment. Perhaps a bit of history will help to clarify the matter.

The Inca civilization has been a marvel to those who have investigated it. Marvelous construction techniques, high art, and a system of roads that has probably not been equalled before or since were a few of the features of that remarkable culture. Along these roads were storage depots, vast in expanse. Along these roads large armies marched, trusting to the depots to supply them. Lacking a written language, the Incas placed youths selected for brilliance in schools where the art of recording data by tying knots was taught. This was, in effect, employing a biological means of communication. The culture perished, perhaps because the communications system could not bear the load placed upon it.

About four hundred and fifty years ago the library of one of England's leading universities contained about 200 volumes. Such was the state of recorded human knowledge. All else continued to rely on basically biological transmission through the guilds, apprenticeship systems and the passage of family knowledge. At about that time one of the greatest gifts the east has ever given the west, movable type, came into fairly common use. The continuing revolution in knowledge spurred by this innovation may be considered the key to what is different in today's world. If men have grown no wiser, they have at least found a means for communicating that bit of wisdom which they do have.

Now we seem to have come to a crucial stage. Our own communications system, our means for storing and transmitting knowledge, has begun to break down. It has been said that the Library of Congress, with better than 5 million volumes, has almost reached the stage at which its treasury of knowledge is inaccessible. The plight of the British Museum is common, and disturbing, knowledge. At the same time, an eminent specialist, Dr. Vanevar Bush, has said that with techniques available today the entire contents of the Library of Congress could be stored in an area not much larger than that occupied by a common reading room table. This system would have the added advantage of making available in a matter of seconds material which now takes hours or even months to dig out. Our communications are literally buried in an avalanche of paper.

In an era when, according to Dr. J. Robert Oppenheimer, knowledge doubles every ten years, when new developments occur at such a pace that a high percentage of research is mere duplication of the unknown work someone else has done, and when our great-

est men of science find difficulty in conversing about their specialties, it seems mere wishful thinking to extoll the book and denigrate the work of the more specialized laborers in the vinyard. While sharing completely Dr. Powell's distaste at the splintering of society, the lack of unifying values, the barrenness of isolation, I cannot share his idea of a solution to the problem. At this stage we need more, rather than less, special work in the library field. If we are to keep our communication system at its present level, that is to say a rather unrespectable distance behind the pace of discover, we must find means of copying with the veritable flood of new material. The technical journal is a vastly more efficient means of disseminating new knowledge than the book, the audio-visual techniques are obviously superior to the older methods of transmitting and storing knowledge. Still they are not enough, and librarians are perhaps in the best position to recognize that they are not enough.

Let us learn a lesson from the educationist. Dr. Powell speaks of them as being over specialized. Perhaps this needs qualification. The current trends in American education are toward systems external to the schools. American industry employs approximately 250,000 research and teaching personnel. This compares to 230,000 in all colleges and universities in the country, with the trend toward industries' broadening the gap. Many educators regard this with dismay, yet the failure of the schools to provide the needed services when and where they are required led to this development. The same fate may overtake the library, if we fail with our training and our methods to keep up with the needs of our growing technology. It is quite conceivable that the whole informational edifice will topple from the burden placed upon it if changes are not made. We, as librarians, should try to think clearly about the alternatives before us. Those of us who love good books, and wish to see them in their rightfully prominent place, must not tilt at windmills. Rather we must look for ways and means of transmitting technically necessary knowledge in so efficient a manner that we shall have time to be good generalists as well. The way to move is forward, as we have no choice, and as we have put it in our power to make ours a living, worth while culture, rather than one of which a later day Eliot will say "it was a worth while culture."

Walter A. Kee, The Martin Co.:

I greatly respect Dr. Powell's eminence in the field of librarianship, but fear, that

like each of us, he tends to slant his thinking in the direction of his specialized field of interest — in his case toward university librarianship. I happen to be one of the university librarians who "wandered off." To be truthful about it though, I did not "wander" but set off on a deliberate journey. To date, I have never once regretted making the trip.

Dr. Powell's tenet in his article seems to be that librarians and books are inseparably bound — to the exclusion of all other forms of knowledge. We, Special Librarians, certainly do not derogate the value of books. They continue to be one of the staples in our libraries. However, they constitute only one form of information and, to us, information is information whether it be a book, a scrap of paper, or a telephone conversation. All are equally important if they answer the question of one of our clientele.

Each library operates according to its charter, either expressed or tacitly understood. The charter for a university library, of course differs in its details from one for a special library but basically they are similar. Here are some phrases which probably exist in the charter for any library.

1. To follow the desires of its management and public.
2. To slant its collection toward its clientele and in accordance with the climate in which it finds itself.
3. To take on additional duties outside the "Traditional Library" functions when requested by management.
4. To take an active not a passive role in assisting its clientele.
5. To organize itself in such a manner as to best carry out the mandates in its charter.
6. To use such techniques and equipment as best enables it to serve its public.

Although all are basically in the information business, a university, public library and special library differ in their approach to disseminating knowledge just as educational institutions — medical, engineering, liberal arts, business schools — differ in their approach to teaching.

These differences account, in part, for the lingo used by special librarians and the content of their programs. Many of the problems we face are not taught in library school, do not come up in most university or public libraries and do not have extensive solutions written down about them. Therefore, we special librarians discuss report distribution, bibliographic control of reports, methods of handling classified reports, pictures, movies, lecture cards, laboratory notebooks and other

offbeat forms of information. In many of our libraries these offbeat forms of publications form the bulk of our collections. Books and journal problems are well covered in textbooks and general library journals. We, therefore, confine ourselves to discussing our unusual problems.

Another factor which may account for our preoccupation with reports is that they have replaced the journal as the reporter of the latest developments. To revise Dr. Powell's comparison, reports are not the leaves of the tree but, in many cases, the roots. New data come out in reports and are eventually accumulated into a book.

I would like to take issue with Dr. Powell's statements that special librarians are "narrowing in" and have lost their interest in books. Our professional ethics demand that each of us expand our energies in providing those services which our public requires. These services most often involve non-book information. However, this does not mean that we are organization men "twenty four hours a day and seven days a week." As many of us as the general librarians read books and general library journals including the *Wilson Library Bulletin*, the *Library Journal* and *ALA Bulletin*.

Finally, I would like to state that much of the demand for special libraries is the result of the failure of public and university libraries to recognize and appreciate the information needs of industry and government. I would like to quote from F. C. Francis, Keeper of the Books, British Science Museum:*

"It is only in more recent times that the tempo of scientific research has speeded up in such a way as to make speedy access to comprehensive collections of periodicals, reports, abstracts, etc., essential. It cannot be denied that in this particular respect the great comprehensive libraries have been slow to appreciate current needs and have fallen sadly behind in providing what is required. They are essentially humanist in outlook and it is inevitable that where science and technology are concerned they have been late starters in the effort to provide satisfactory library services. Not only were they late starters, their staff were and are, for the large part, unskilled in the subjects dealt with by scientists and technologists, and the idea of employing specially qualified staff is one which has only recently been fully appreciated. The vacuum thus created has had to be filled by resources outside these libraries and in many instances special libraries for science and technology have been created which carry out some of

the tasks which are proper to a national (large) library . . ."

*Francis, F. C., "The Contributions of the National Library to the Modern Outlook in Library Services," *ASLIB Proceedings*, Vol. 10, No. 11, November 1958, P. 271.

Harold Hughesdon, Minnesota Mining & Manufacturing Co.:

I am accepting your open invitation to reply to Dr. Powell's letter which was carried in the winter issue of *Sci-Tech News*. Let me say at once that I have seldom seen a clearer exposition of the principles which I have taught to library school students. This includes repeated offerings of "Literature of the Natural Sciences" at the College of St. Catherine in St. Paul.

Librarians have been criticized in the past for being mere technicians. At all costs let us be sure we avoid giving the impression that as special librarians we are merely super-special technicians. I think one of the strongest aids to recruiting the most desirable kind of student into the library profession is the presentation of the idea that as a practising librarian his rightful domain is nothing less than the totality of recorded thought.

"Some books are to be tested, others to be swallowed, and some few to be chewed and digested." This dictum of Bacon's could well be applied to the reading habits which librarians should strive to acquire. I do not think that as special librarians we must restrict ourselves only to the chewable and digestible variety of book. The more we swallow, and even the more we taste, the better off we will be. Aristotle, tasted by chemists, has proved of considerable help in educating them on the subject of technical reports.

Certainly, I agree that librarians do not have the right to make a fetish of books, nor of microprints and punched cards; they do have both the right and the duty to make a fetish of recorded thought, whether in science, humanities, or elsewhere. I think that special librarians should be very careful before they sell this right for a mass of information bits.

John French, Timken Roller Bearing Co.:

A timely — and distinguished — corrective to Dr. Powell's way of thinking appears in the November issue of *Aslib Proceedings*.

This is the presidential address of Mr. F. C. Francis given at the 33rd Annual Conference of *Aslib* last fall. It is titled, "The Contribution of the National Library to the Modern Outlook in Library Services."

Since Mr. Francis is the Keeper, Department of Printed Books, of the famed British Museum, he represents an institution, and a

tradition, that is scholarly and humanistic to the core.

He does not admonish, scold, or patronize. On the contrary, he extends a cordial hand to us. Typical of his point-of-view is the following passage: "The activities of the special library are largely concerned, I would suppose, with an active aggressive use of information. This has always been the feature about the work of a special library which has most appeal to me. I want that approach to be adopted by the separate sections of the great national library but they will be acting for a different kind of use."

He obviously does not object to specialization but sees it as part of our modern world. Also he does not refer to the book in particular, but rather to information in general.

I think that Mr. Francis' paper is a warming and hearty tribute to the world of the special library. A careful reading of it might extend Dr. Powell's horizons and I commend it to him.

Dr. Powell's paper seems to be uncertain and not perfectly clear, rhetoric aside. I believe that logic is as fine a thing as eloquence to specialize in. He actually seems to be dealing with two distinct ideas. One is the idea of the book, the other is the notion that librarianship deserves the name only if it is practiced within the hallowed walls of a New York Public Library or some similar institution. There is yet a third idea, really part of the second, the belief that specialization is some kind of an evil.

Yet, writes Dr. Powell, specialization is perfectly in order if it is carried on within the aforesaid hallowed walls. The sting is somehow removed. I would question the logic of this idea. In any case, specialization is obviously an attribute of the entire material universe. Matter cannot, perhaps, exist, except as it takes a most particular, specific form. Should we therefore be ashamed of it? And as there is no conflict between uniquely existing things and the laws that bind, connect and control them, so there should be no cause for alarm in our human specializations. Uniqueness, specificity, is as much a condition of existence as the law that binds and gives meaning.

Having called us home to the great general libraries, he then goes on to say that "the heart of this general library world" may also be found in a town library of New Mexico, "which has a set of the Book of Knowledge, the World Almanac, Riders of the Purple Sage, and the Jungle Book."

Would not Dr. Powell admit that our special libraries are also town libraries in their

own way? We have our own public, our own community — often a highly complex one —, while our work may be broad and diverse indeed. Most of us are also doing a job that has to be done. We should not be in danger of losing our souls.

**Lawrence Clark Powell,
University of California:**

Thank you for the way you presented my letter. Please send me half a dozen copies of the issue. Sorry you didn't catch my slip: the NYPC at Broadway instead of 5th Avenue.

BIBLIOGRAPHY DIGEST

Compiled by Mildred Benton

This new feature represents an attempt to corral, from various sources, bibliographies within the general field of interest of Sci-Tech readers. Entries are alphabetical by title within a broad subject arrangement and are numbered in sequence to facilitate possible indexing at a later date. The compiler cannot guarantee the availability of copies for acquisition. As many of the items listed are obtained from the Armed Services Technical Information Agency Technical Information Bulletins, it is suggested that certified users of ASTIA services apply there. (AD numbers when known are included for convenience.) Others should apply to the Office of Technical Services, U. S. Dept. of Commerce, Washington 25, D. C. unless source of supply is otherwise designated.

AGRICULTURE

1. Aircraft in agriculture. A selected list of references.

N. G. Larson, Washington, D. C., U. S. Dept. of Agriculture, Oct. 1958. 25 p. (Library List 65)

A listing of selected references on agricultural aviation published during 1945-1957. Operational and economic aspects are covered.

2. Bibliography of irrigation, drainage, river training and flood control, 1954-1956.

New Delhi, International Commission on Irrigation and Drainage, 104 Sundar Nagar, 1958. 115 p.

About 3000 references, many of them accompanied by short abstracts, are listed in alphabetical order by authors' names under Universal Decimal Classification headings which are subdivisions of the following: — Economics; Law and administration; Model experiments and hydrodynamics; Hydrology and meteorology; Irrigation; Drainage; Fish passes; Natural water course, rivers, etc.; and Agriculture.

3. The economics of irrigation in the Eastern United States. A list of annotated references.

E. G. Davis, E. S. Suber and W. F. Ehlers.

Washington, D. C., U. S. Dept. of Agriculture, Oct. 1958. 68 p. (Library List 66)

This bibliography, classified according to regions, concerns irrigation costs in the 31 eastern states. There is a combined author and subject index.

BEARINGS

4. **A bibliography on gas-lubricated bearings.** E. B. Sciuilli, Philadelphia, Pa. Laboratories for Research and Development, Franklin Institute, Dec. 1, 1957. 89 p. (Interim Rpt. 1-A2049-1)

Indexed bibliography and abstracts of papers, patents, and books, 1820-1957, with associated references and compiler's abstract notes.

5. **A literature survey of bearings, friction, wear, and lubrication pertinent to cryogenic applications.**

P. L. Barrick, J. A. Brennan et al. Washington, D. C. National Bureau of Standards, Oct. 23, 1958. 253 p. (Rpt. 6018)

References have been selected from the literature of the past ten years appearing in Engineering Index Chemical Abstracts, Industrial Arts Index, and Mechanical Engineering. There is an author and subject index.

CHEMISTRY

6. **High temperature synthesis of new thermally stable chemical compounds.** Stanford, Calif., Stanford Research Institute, Oct. 10, 1958. n. p. (Quart. Prog. Rpt. 1)

The bibliography, which comprises Appendix B, includes 589 references with abstracts. They are subdivided into three broad categories: (1) Inorganic synthesis (with special emphasis on spinels and suboxides); (2) Organometallic synthesis (with special emphasis on compounds containing transition metals); (3) Organic synthesis (with special emphasis on fluorinated compounds).

7. **Literature survey on the synthesis of epoxy resins from bis-phenols.**

Walter Erich, Dover, N. J. Picatinny Arsenal, Mar. 1958. 38 p. (Tech. Note 12) AD-158 199.

A complete bibliography of 53 references is included on every 4, 4-dihydroxydiphenylalkane that has been synthesized up to June 1957.

COMMUNICATION

8. **A bibliography on telemetry.** M. V. Kiebert. INST. RADIO ENG. TRANS. TRC-4:10-19, June 1958.

A comprehensive non-annotated bibliography of 533 references relating to the art of telemetry (process of transferring information).

9. **Literature review: tracking control mechanisms and displays (light antiaircraft system oriented).**

S. A. Hicks, Aberdeen, Md., Human Engineering Lab., Aberdeen Proving Ground, Dec. 1957. 13 p. (Tech. Memo. 9-57)

Forty-six references are included in this review dealing with tracking, control and display systems, and compensatory vs. visual displays.

10. **Survey of literature on chemical tracking aids.**

Ernst Grundemeier. Holloman Air Force Base, N. Mex., U. S. Air Force, Aug. 1957. 121 p. (Tech Rpt. 57-7)

Summary of reports published up to 1953 on chemical smokes most applicable for use as chemical tracking aids.

DATA CONTROL

11. **Bibliography, a list of Soviet and foreign literature on computer topics for 1955.** AUTOMATION & REMOTE CONTR. 18:908-920, Sept. 1957.

12. **Bibliography of sampled-data control systems and z-transform applications.**

H. Freeman and O. Lowenschuss.

INST. RADIO ENG. TRANS. PGAC 4:28-30, Mar. 1958.

Ninety-seven references, alphabetically listed, by author, and subject index with cross references, comprise this bibliography. It was prepared to simplify the task of searching the literature to obtain either a general acquaintance with the field of sampled-data control or to obtain information on certain aspects of it.

13. **Review of electronic computer progress during 1956.**

INST. RADIO ENG. TRANS. PC-EC 6:55-60, Mar. 1957.

Literature survey of advances made in computer systems, programming, components, memories, analog circuits, digital circuits, input-output systems, logical design and switching theory, applications of computers, and sampled data control systems.

14. **A selective bibliography on sampled data systems.**

P. R. Stromer. INST. RADIO ENG.

TRANS. PGAC-6:112-114, Dec. 1958.

This 53-item bibliography, compiled by the Librarian of the Light Military Electronics Dept., General Electric Co., is quite similar to the one by Freeman and Lowenschuss (Item 12) but because it includes brief descriptions of each item it provides a useful supplement. Only "classic" literature references prior to 1955 are listed; the majority of the items refer to current material in the comparatively new area of feedback control system literature.

ELECTRICAL ENGINEERING

15. **Bibliography on power capacitors, 1954-1956.**

Capacitor Subcommittee, Committee on Transmission and Distribution, Am. Institute of Electrical Engineers. POWER APPARATUS AND SYSTEMS 38:666-669, Oct. 1958.

A bibliography with this title was first published as AIEE Special Publication S-43 in January 1952. It covered the period 1925-1950. It was supplemented by AIEE Transactions Papers: Bibliography on Power Capacitors, 1950-1952 in the Dec. 1953 issue, Part II, p. 1336-1339; and 1952-1954 in Apr. 1956, Part III, p. 26-28. The present listing includes 127 articles.

16. **Magnetic amplifier bibliography, 1951-1956.**

COM. & ELECTRONICS. 39:613-627, Nov. 1958.

This listing of 849 items without annotations covers foreign and domestic articles and patents and was prepared by members of the Bibliography Working

Group of the Applications Subcommittee of the AIEE Magnetic Amplifiers Committee, E. J. Alexander, Chairman.

17. 1956 supplement to the bibliography and abstracts on electrical contacts.

Philadelphia, Pa., Am. Society for Testing Materials, 1957, 40 p.

Contains 165 references to the 1955 and 1956 literature.

18. The status of microwave applications of ferrites and semiconductors.

B. Lax. INST. RADIO ENG. TRANS. PG MTT-6:5-8, Jan. 1958.

Includes a bibliography of 88 references.

19. Transformer and paper capacitor reports available from the Library of Congress.

INST. RADIO ENG. TRANS. PGCP-5:157-160, Dec. 1958.

A non-alphabetical listing of research reports obtainable from the Photoduplication Service, Publications Board Project, Library of Congress. PB numbers are included, as well as prices. The reports on paper capacitors cover the period 1937-1957 and those on transformers cover the period 1927-1958.

FATIGUE

20. Fatigue of concrete — a review of research.

G. M. Nordby. AM. CONCRETE INST. J. 30:191-219, Aug. 1958.

More than 100 publications were surveyed, including foreign literature, and the most important investigations are summarized. Compression, flexure, and tension studies in fatigue of bond, reinforced concrete, and pre-stressed concrete.

21. Thermal shock and fatigue, a literature survey.

Harry Majors, Jr. University, Ala., Bureau of Eng. Research, Alabama University, 1957. 56 p. (Bull. 4)

Comparison of brittle with ductile materials. Analysis of thermal shock parameters. Ductile material under thermal shock. Current studies on thermal cycling.

FUEL

22. An annotated bibliography on coal.

P. O. Yingst. COLO. SCHOOL OF MINES Q. 53:1-102, Jly 1958.

Deposits, products, compositions, cleaning, coking, gas turbines, waste products, coal research, coal vs. atomic power are covered.

23. Bibliography of fuel stability, suppl. 1.

San Antonio, Tex., Ordnance Fuels and Lubricants Research Lab., Southwest Research Institute, Apr. 1957. 65 p. AD-150 851.

The survey covers fuel storage stability publications from 1952 to date.

24. Bibliography on solid fuel elements.

H. C. Friedemann. Bayside, N. Y., Sylvania-Corning Nuclear Corp., 1958. 64 p.

Includes 306 annotated references. Available from the Corporation, price \$1.00.

RADIO

25. Bibliography of Soviet research on radio wave propagation antennas.

N. A. Logan and R. Flynn. Bedford, Mass.,

Air Force. Cambridge Research Center, Jly. 1957. 15 p. (Tech. Note 57-113) AD-133 638.

The Soviet papers were prepared in order to help acquaint U. S. scientists with the work which has been done in the USSR. A list of abbreviations employed by the Soviet journals precedes the bibliography. The papers are listed alphabetically by author and title only, and cover the period from 1909 to Jan. 1, 1956.

26. Bibliography on the theory of diffraction and propagation of radio waves.

N. A. Logan and M. E. Sherry. Bedford, Mass., Air Force. Cambridge Research Center, Apr. 1957. 105 p. (Tech Rpt. 57-102) AD-117 044.

The entries in this bibliography were compiled from the literature available prior to 1955. The arrangement is alphabetical by author.

27. Checklist of reference to literature on tropospheric propagation of UHF, VHF, and SHF radio waves (1918-1957).

W. Nupen and G. Thuronyi. Washington, D. C., National Bureau of Standards, Aug. 26, 1958. 174 p. (Rpt. 6001)

This compilation of over 700 references to literature on the meteorological and topographical factors affecting the propagation of high-frequency (300 to 30,000 mc) radio or radar waves through the troposphere includes most of the references and abstracts contained in the two bibliographies on this subject published in the Sept. and Oct. 1957 issues of Meteorological Abstracts and Bibliography and a large number of additional references.

28. Compilation of recent literature on radio astronomy.

M. L. Rice. METEOROL. ABS. & BIB. 9:72-103, Jan. 1958.

A few early historical papers are included. The bulk of the material has been published since 1950. References are annotated.

29. Radio astronomy.

F. R. Taylor. London, Library Association, Chaucer House, 1958. 15 p.

A bibliography of 204 items, described as highly selective and concentrated on material published since 1950.

RESEARCH AND DEVELOPMENT

30. A comprehensive bibliography on operations research, through 1956, with supplement for 1957.

Beverly Bond, Harish Merchant and A. J. Yaspan. New York, Wiley & Sons, 1958. 188 p. (Operations Res. Soc. of Am. Pubs. in Operations Res. no. 4)

Contains references published through Dec. 1957. Includes approximately 3000 titles of articles and 40 specialized bibliographies.

31. Invention, research and development: a survey of the literature.

R. R. Nelson. Santa Monica, Calif., Rand Corp., Apr. 15, 1958. 65 p. (Res. Memo. 2146)

A selective summary is presented of the literature on invention, research and development.

32. Military and strategic implications of technological progress. A selected list of titles.

Washington, D. C., Army Library, Aug. 1, 1958. 23 p. (Spec. Bib. 17) AD-202 779.

An annotated bibliography is presented of representative materials that concern military and strategic implications of technological progress. The references are grouped according to the following headings: general, strategic aspects, military aspects, and supporting bibliographies.

33. A selected bibliography of research and development and its impact on the economy.

Jack Baranson and M. M. Boyden. Washington, D. C., Office of Special Studies, National Science Foundation, May 1958. 21 p. (Rpt. 58-18)

Some 400 titles are listed alphabetically by author within the following sections: general background, philosophy and history of science, public policy, socio-economic patents, administration and management of industrial research, funds and manpower statistics.

34. A selected research and development bibliography for practitioners.

P. H. Gantt. FED. BAR. J. 17:475-486, Oct./Dec. 1957.

Purpose was to collect basic materials in the R&D Contract Law field, and within the limitations of time and space, provide a guide to supplementary materials.

THERMOELECTRICITY

35. Bibliography on thermoelectricity.

S. Goldman. Silver Springs, Md., Applied Physics Laboratory, John Hopkins University, Nov. 1958. 21 p. (TG-326)

Lists literature cited in Physics Abstracts, Electrical Engineering Abstracts and Chemical Abstracts from Jan. 1939 through mid-1958.

36. Semiconductor thermoelectric generators and refrigerators and their applications.

New York, Infosearch, Technical Literature Information Service, Aug. 1958. n. p., (Russian Lit. Survey SEM-1-56)

Six pages of bibliography of literature on semiconductors, their properties and applications, is given at the end of the volume.

SCIENCE-TECHNOLOGY SERIALS

Compiled by Andrew S. Glick

Contributors to this issue include Miss Lillie Hartmann, of Borg-Warner Corp.; Mr. Walter Shelton of John Crerar Library, Bay State Periodical Service, Mrs. Betty T. Bateman of Texas Engineers Library, and Miss Effie N. Birdwell of Monsanto Chemical Company.

Contributors are requested to give complete bibliographic information in the same style as used in SCI-TECH NEWS. This includes frequency, price, place of publication and publisher.

ACTA REUMATOLOGICA LATINOAMERICANA

Vol. 1, No. 1, Sept. 1958, quarterly, \$3.00. Buenos Aires, Argentina.

Sci-Tech News Spring 1959

AMERICAN JOURNAL OF CLINICAL HYPNOSIS

Vol. 1, No. 1, July 1958, quarterly, \$6.00 to individuals, \$5.00 to libraries, scientific organizations, and educational foundations. Phoenix, Ariz.

Official journal of the American Society of Clinical Hypnosis and the Academy of Applied Psychology in Dentistry.

AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS. TRANSACTIONS.

Vol. 1, No. 1, 1958, annual, \$4.00. St. Joseph, Mich. Vol. 2, No. 1 will be issued in the Spring of 1959 at a cost of \$5.00 to nonmembers and \$2.50 to members.

This publication is a companion to the Society's journal AGRICULTURAL ENGINEERING.

AMERICAN SOCIETY OF LUBRICATION ENGINEERS. TRANSACTIONS.

Vol. 1, No. 1, Apr. 1958, semi-annually, \$17.00 to nonmembers, \$5.00 to members. Pergamon Press for ASLE, New York 22, N. Y.

The sole purpose of this publication is to provide a custom publication for the dissemination of information and research data to further the progress of scientific lubrication.

ANNALES DE MEDECINE PHYSIQUE

Vol. 1, No. 1, Mar. 1958, quarterly, \$6.00. Lille, France.

Organ of the Societe Francaise de Medecine Physique.

ATOMIC AGE

Due to technical difficulties publication of this journal has been abandoned without any issues being published.

AUTOMATIC OFFICE

Vol. 1, No. 1, Mar. 1958, monthly, \$18.00. Detroit 2, Mich.

This is a non-technical management report on the concepts, methods, and equipment of office automation.

BIOCHEMISTRY SECTION of Proc. Akad. Nauk, SSR (Doklady)

Jan. 1958 issue ready Sept. 1958. Publication will be published by American Institute of Bibliological Science in 1959.

CANADIAN MATHEMATICAL BULLETIN

Vol. 1, No. 1, Jan. 1958, 3 issues per year, \$3.00. Canadian Mathematical Congress, Toronto, Canada.

Includes short research papers, expository articles, notes, problems, book reviews, and news items.

CZECHOSLOVAK JOURNAL OF PHYSICS

Vol. 9, No. 1, Jan. 1959, bi-monthly, \$40.00. Consultants Bureau, Inc., New York 11, N. Y.

Widely regarded as one of the most important publications in the field. This journal is originally published in an edition containing Russian, German, English and French articles. The CB translation of non-English articles is designed to disseminate this information to western scientists who cannot read these languages. The translations by bilingual physicists, includes all tabular, diagrammatic, and photographic material integral with the text.

DATA PROCESSING

Vol. 1, No. 1, Jan. 1959, quarterly, \$12.00. Iliffe & Sons, London, England.

" . . . will demonstrate how electronic computers,

calculators, and other data processing equipment can be used to save time, money, and manpower."

ELECTRICAL ENERGY (LONDON)

Publication discontinued after Jan. 1959.

ELECTRONIC WEEK

Discontinued with the issue of Aug. 25, 1958.
ENGINEERING MATERIALS AND DESIGN
Vol. 1, No. 1, Oct. 1958, monthly, \$5.25.
Heywood and Co., London, England.

The object of this publication is to bring to engineering designers information of new design and material developments in all branches of engineering. This information will be presented in articles, reports, and data sheets prepared by authors with first hand experience.

EXPERIMENTAL NEUROLOGY

Vol. 1, No. 1, Jan. 1959, bi-monthly. Academic Press, New York, N. Y.

A new journal which will publish results of original research on the nervous system. Experiments in neurophysiology, pharmacology, neuro-chemistry, neuroanatomy, embryology, and pathology will be considered.

FIRE RESEARCH ABSTRACTS AND REVIEWS

Vol. 1, No. 1, Sept. 1958, quarterly, no price given. National Research Council, Committee on Fire Research, Washington, D. C.

GEOKIMIYA

Vol. 1, No. 1, January 1959, 8 issues per year, \$20.00. Geochemical Society Mineralogical Laboratory, University of Michigan, Ann Arbor, Mich.

This journal is now available in English translation. The journal reports on current Russian research in geochemistry.

GEOLOGICAL ABSTRACTS

Ceased publication in Dec. 1958, and superseded by GEOSCIENCE ABSTRACTS, which see.

GEOSCIENCE ABSTRACTS

Vol. 1, No. 1, Jan. 1959, monthly, \$15.00 to members of Amer. Geol. Inst. Member Societies, \$35.00 to nonmember individuals, colleges and universities, and public libraries, \$65.00 to private organizations and government agencies. American Geological Institute, Washington 25, D. C.

Replaces GEOLOGICAL ABSTRACTS which was discontinued in Dec. 1958.

IMMUNOLOGY

Vol. 1, No. 1, Jan. 1958, quarterly, \$9.00 per year. British Society for Immunology, Oxford, England.

INDUSTRIAL RESEARCH

Vol. 1, No. 1, Jan., 1959, quarterly, \$3.00. Scientific Research Pub. Co., Inc., Chicago 4, Ill.

INSTITUTE OF METAL FINISHING. BULLETIN.

Discontinued publication with Summer 1958 issue. Superseded by INSTITUTE OF METAL FINISHING. TRANSACTIONS, which see.

INSTITUTE OF METAL FINISHING. TRANSACTIONS.

Vol. 36, No. 1, Autumn 1958, quarterly, \$8.82.

London W. C. 1, England.

This publication replaces the Institute's BULLETIN. Volume 34 (1957) was published early in 1958. Volume 35 will appear in Spring of 1959 probably as one volume.

INTERNATIONAL JOURNAL OF AIR POLLUTION

Increases to 2 volumes per year effective 1959.

JOURNAL OF HEAT TRANSFER

Vol. 1, No. 1, Feb. 1959, quarterly, \$10.00 to nonmembers, \$5.00 to members. American Society of Mechanical Engineers, New York 18, N. Y.

This journal was formerly part of the TRANSACTIONS, but must now be purchased separately. It covers all aspects of heat transfer.

JOURNAL OF PROFESSIONAL PRACTICE

Vol. 84, No. PP1, Dec. 1958, irregular, \$4.00 of membership dues are applied as subscription to the journal. American Society of Civil Engineers, Ann Arbor, Mich.

This is another of the specialty journals which supersede the Society's Proceedings.

JOURNAL OF THE AERO/SPACE SCIENCES

Name has been changed from JOURNAL OF THE AERONAUTICAL SCIENCES with Vol. 25, No. 7, July, 1958.

JOURNAL OF THE CHEMICAL SOCIETY (LONDON)

For 1959 the subscription price has been increased to \$56.00.

JOURNAL OF THE RESEARCH & DEVELOPMENT LABORATORIES

Vol. 1, No. 1, Jan. 1959, quarterly, gratis. Portland Cement Association, Skokie, Ill.

MATERIALPRUFUNG

Vol. 1, No. 1, Jan. 1959, monthly, \$18.00. VDI-Verlag GmbH, Dusseldorf 10, Germany.

Sponsored by the DEUTSCHER VERBRAND FUR MATERIALPRUFUNG. The journal covers methods of testing (destructive and nondestructive, testing instruments and processes, etc.)

METRIKA

Vol. 1, No. 1, May 1958, 3 issues a year, \$4.50 per yr. Physica Verlag, R. Liebling, K. G., Wurzburg 2, Germany.

This journal continues MITTEILUNGSBLATT FUR MATHEMATISCHE STATISTIK UND STATISTISCHE VIERTELJAHRESSCHRIFT.

ORTHOPEDICS

Vol. 1, No. 1, Nov. 1958, monthly, \$10.00. Orthopedics, Inc., Houston, Texas.

"The only monthly publication in the world dedicated exclusively to orthopedics. All articles are written by qualified orthopedists for useful application by general practitioners."

PATENT, TRADE-MARK, AND COPYRIGHT JOURNAL OF RESEARCH AND EDUCATION

Vol. 1, No. 1, June 1957, quarterly, \$15.00. Patent, Trade-Mark and Copyright Foundation of the George Washington University, Washington 6, D. C.

PETRO CHEMICAL INDUSTRIES

Vol. 1, No. 1, June 1958, monthly, \$2.00.
Conroe, Texas.

PETROLEUM GEOLOGY

Vol. 1, No. 1, 1958, semi-monthly, \$18.00,
Columbia, S. C.

This is a translation of the Russian Journal GEOLOGIJA NEFTI.

PHYSICS AND CHEMISTRY OF SOLIDS

Publication changes from 3 to 5 volumes
yearly beginning in 1959.

PLANETARY AND SPACE PHYSICS

Vol. 1, No. 1, Nov. 1958, bi-monthly, \$33.60.
Pergamon Press, New York 22, N. Y.

The journal is established as an international medium
for the publication of papers of geostrophysical re-
search contributing to a unified knowledge of the
planetary space environment. To be included will be
papers on general planetary hydrodynamics as well
as studies of cosmic radiation, meteorological physics,
and inter-planetary composition.

REVISTA LATINOAMERICANA DE MICROBIOLOGIA

Vol. 1, No. 1, Mar. 1958, quarterly, \$6.00.
Mexico 11.

Articles have English summaries.

SOCIEDAD CUBANA DE HISTORIA DE LA MEDICINA REVISTA

Vol. 1, No. 1, Mar. 1958, quarterly, \$2.00.
Havana, Cuba.

SOIL SCIENCE (Pochvovedenie)

No. 1, Feb. 1959 of Jan. 1958 Russian issue,
monthly, \$40.00 to individuals and industrial
libraries, \$20.00 to university and non-profit
libraries. Translations to be done by Ameri-
can Institute of Biological Science, Washing-
ton 6, D. C.

SPACE/AERONAUTICS

Name has been changed from AVIATION
AGE with Vol. 50, No. 4, Oct. 1958.

SPACE TECHNOLOGY

Vol. 1, No. 1, Jan. 1958, quarterly, \$3.00.
McGraw-Hill, New York 36, N. Y.

SPACE TECHNOLOGY information appearing in the
issues of AVIATION WEEK is reprinted in this sepa-
rate publication for scientific, engineering, manage-
ment, and military readers.

SPECTROCHIMICA ACTA

Vol. 12, No. 1/2 in press December, 1958.
Proceedings of the Colloquium Spectroscopi-
cum Internationale VI issued in lieu of Vol.
11.

TECHNICAL TRANSLATIONS

Vol. 1, No. 1, Jan. 1959, monthly, \$12.00.
Office of Technical Services, Washington 25,
D. C.

This publication replaces TRANSLATION MONTHLY.

TETRAHEDRON

Publication changes from 3 to 5 volumes
yearly beginning in 1959.

THEORY OF PROBABILITY & ITS APPLICATIONS

Vol. 1, (1956), to be ready Mar. 1959, bi-
monthly, \$18.00. Society for Industrial and
Applied Mathematics, Wilmington 99, Del.

Vol. 2 (1957) and Vol. 3 (1958) to follow at 3 month
intervals.

TRANSLATION MONTHLY

Discontinued with the Dec. 1958 issue. Re-
placed by a new journal TECHNICAL
TRANSLATIONS, which see.

WILDLIFE DISEASE

Vol. 1, No. 1, Jan. 1959, quarterly, \$1.00.
Wildlife Disease Association, American Insti-
tute of Biological Sciences, Washington 6,
D. C.

This journal is to be published in microcard form as
an experiment. The publishing will be done by AIBS
with aid of grants from Council on Library Resources
and the National Science Foundation. This is the first
attempt to publish a journal exclusively in microform.

DOCUMENTATION DIGEST

By Gertrude Schutze

ABSTRACTING AND INDEXING

1. **Problem areas in abstracting in the field
of the physical sciences and technology:
an opinion survey.**
D. B. Brogan. M. A. Thesis, University of
Denver, School of Librarianship, 1958.
263 p.
2. **Some considerations in the preparation
of pharmaceutical abstracts.**
D. E. Francke. AM. J. HOSP. PHARM.
15:963-972 Nov. 1958.

Past studies of the need for a pharmaceutical abstract
service are reviewed. The needs, objectives, and
scope of such a publication prepared by a central
agency on a cooperative basis are estimated.

3. **A survey of abstracting services in five
companies of the Philadelphia area.**
K. M. Donovan. M. S. Thesis, Drexel In-
stitute of Technology, School of Library
Science, 1958.

BIBLIOGRAPHY

4. **Card-form publications in medicine and
related fields.**
J. M. Fulcher. MED. LIB. ASSN. BUL.
47(1):48-53 Jan. 1959.

A check list of 73 card-form services related to medi-
cine, two-thirds of which are current, is presented
and these publications are grouped in 9 categories.
The cost of filing the cards and the space required
for filing cabinets tend to make the card form un-
popular.

5. **Card-form publications in medicine and
related fields: an annotated bibliography.**
J. M. Fulcher. Washington National Li-
brary of Medicine, 1958. 53 p.

These seventy-three publications in medicine and the
sciences basic to medicine are issued in card form
or paper slips except for one loose-leaf system. Full
bibliographic information is given for each and a
brief description of the service. Appendix B lists 34
non-medical card-form publications.

6. **The chemical and related literature of
Australia and New Zealand.**
L. J. Stevens. J. CHEM. EDUC. 35(11):
566-567 Nov. 1958.

The paper deals with the historical development of the chemical and related scientific literature of Australia and New Zealand and includes patent literature and scientific institutions. A selected number of chemical and related periodicals and other literature are described.

7. Drug information sources (Canada, Great Britain, Netherlands and United States) Supplemental data.

Pharmaceutical Section, Science-Technology Division, Special Libraries Association. AM. J. PHARM. 130(10):345-351 Oct. 1958.

This installment of the world list covers supplemental data for the countries listed in the title.

8. Guide to Russian medical literature.

S. Adams and F. B. Rogers, eds. Washington, National Library of Medicine, 1958. 89 p. (Public Health Service Publication No. 602) \$40.

Eight papers discuss Western language approaches to Russian medical literature as well as Russian language sources; the availability of Russian scientific publications in cover-to-cover journal translation; translating facilities available from universities, individuals and organizations; procurement of this literature by purchase or exchange; selected serial titles currently received by the National Library of Medicine; Russian medical bibliography; medical libraries in Russia; and the medical press in the USSR.

9. Is our present means of disseminating results of marine biological research adequate?

F. S. Russell. International Union of Biological Sciences. International Conference on Marine Biological Laboratories, Rome, April 18-23, 1955. LA RICERCA SCIENTIFICA 26 (Suppl. A):95-108 (1956)

A list of principal journals devoted in whole or in part to the publication of papers in marine biology is presented.

10. Some aspects of searching in the pharmaceutical literature.

H. Oatfield and B. R. Emilio. AM. DOC. 9(4):238-272 Oct. 1958.

The paper discusses searching in these categories: 1) principles and techniques of selecting sources, stressing regional aspects, new abstracting services, new terminology; 2) peculiarities of pharmaceutical literature such as new drugs, toxicological data, theses; 3) sources of statistics and statistical methodology, foreign patents, Japanese literature, Russian antibiotic literature; 4) special services such as card services, news sheets, special collections, table of contents services, etc.; 6) six urgent needs of the searcher. 110 references are listed and detailed lists of toxicological references and patent services are appended.

11. Les sources du travail bibliographique. T. 3, Bibliographies specialisees (sciences exactes et techniques)

L-N Malcles. Paris, Minard, 1958. 575 p. \$24.

The third volume of this bibliographical manual lists well selected bibliographies, dictionaries, yearbooks, periodicals, treatises, and manuals in the various scientific, technical, and medical fields.

12. A statistical treasure hunt.

D. Hill. SLA S. CALIF. CHAP. BUL.

Vol. 19, No. 4, Aug.; Vol. 20, No. 1, Nov. 1958.

The first part of this two-part article surveys the special statistical issues that appear in trade magazines pertaining to the raw materials industries: mining, farming, fishing, electricity, oil, gas, pulp, paper. Part two deals with those special issues covering finance, insurance, manufacturing, sales, and transportation.

BOOK TRADE

13. O-P books; a library breakthrough.

E. Power. AM. DOC. 9(4):273-276 Oct. 1958.

The Xerox service of University Microfilms, Inc. is summarized and costs are given. The uses of this new microfilm-Xerography technique include the reproduction of the o-p books of 41 publishers on regular paper or on permanent alpha cellulose, safe duplication of rare books and manuscripts, replacement in usable form, of essential books on paper which is deteriorating, publication of original manuscripts, and conversion of microfilm to full size paper copies.

14. Serials and journals in the M.I.T. library.

N. N. Nicholson and W. Thurston. AM. DOC. 9(4):304-307 Oct. 1958.

An account of the publication in book form of the serials and journals in the M.I.T. libraries by printing from IBM punched cards on which the holdings were recorded. Figures are given for the time of typist, cataloger and punch card operators, as well as the cost of the entire project.

CATALOGING AND CLASSIFICATION

15. The Barnard classification.

C. C. Barnard. DOK. MED. U BIOL. 2(3):55-61 July 1958.

The author reviews the structure of the classification and its use in medical libraries and documentation.

16. Cataloging and classification of medical library materials: 1946-1956. Ten years of progress and problems. I. Cataloging.

H. Bloomquist. MED. LIB. ASSN. BUL. 47(1):28-47 Jan. 1959.

This bibliographic essay reviews the progress and the problems of medical library cataloging, subject headings, and classification. Contains 70 references to the literature touching on these fields during the decade 1946-1956.

17. Classification.

J. Metcalfe. AUSTRALIAN LIB. J. 7(2): 24-39 April 1958.

Critically considers classification in all its aspects for the shelf and for the catalog, and concludes that the classification of the future will have to be the product of many minds and institutions in cooperation.

18. Classification schemes and subject heading lists for specialized libraries; a bibliography.

E. L. Baerwald. M. S. Thesis. Western Reserve University, School of Library Science, Cleveland, Ohio, 1958. 46 p.

19. The divided catalog: a summary of the literature.

D. Grosser. LIB. RESOURCES & TECH. SERV. 2(4):238-252 Fall 1958.

For abstract see STN 12(1):12, Item 59.

20. Library classification and the field of

knowledge.

D. J. Foskett. London, The Library Association, Reference and Special Libraries Section, 1958. 15 p. (Occasional Papers No. 1) \$5.00.

Foskett surveys the changes in the field of knowledge by reviewing the dominant philosophies: those of Plato, Aristotle, Bacon, Comte, and Spencer, and shows how they influence library classification. The study indicates that library classification must change as knowledge itself changes if we are to organize the results of research effectively.

21. Patent classification from the point of view of the public.

N. J. Flower. ASLIB PROC. 10(12):320-322 Dec. 1958.

The four different purposes for which the public needs the British patent classification are briefly described. Suggests that the system be improved so as to provide the maximum information for the diverse purposes of the public as well as the solitary purpose of the Patent Office.

DOCUMENTARY REPRODUCTION

22. Application of microcopies in documentation centers.

G. Cordonnier. UNESCO BUL. LIB. 12(11-12):271-276 Nov.-Dec. 1958.

The particular uses of microcopying which are being studied and experimented with at the documentation center of the Centre National de la Recherche Scientifique in Paris.

23. Duplicating methods in the library.

K-A Eriksson. TID. DOK. 14(4):49-52 1958

The article describes the Spirit Process which uses a Master placed over a face-up sheet of special carbon. This process can be used for preparing book lists and catalog cards and other lists. Combined with an automatic typewriter (Flexowriter) a form of integrating data processing can be built-up. (Swedish).

24. FLIP: Film Library Instantaneous presentation.

G. Williams. LIB. RESOURCES & TECH. SERV. 2(4):278-281 Fall 1958.

A detailed description of an automatic microfilm searching machine, developed and built by Benson Leher Corp., Los Angeles, designed to locate quickly any desired frame in a 1,200 foot reel (72,000 frames) of 16 mm., double-perforated microfilm, and to project this frame on the built-in viewing screen.

25. Graphische Neuheiten- und Fachkartei.

Indermuhleweg 14a, Bern 18, Switzerland. 22 Sw. Fcs./year.

A monthly service consisting of about 12 loose sheets, 15x21 cm. or double that size folded in two, which contains illustrated descriptions of new equipment in the printing and document reproduction field. The top left hand corner of each sheet carries a special decimal class number for filing, and the top right corner subject headings for alphabetical arrangement.

26. The miraculous bubble: a look at Kalfax microfilm.

P. Scott. LIB. RESOURCES & TECH. SERV. 3(1):40-46 Winter 1959.

Kalfax Microfilm produces positive copy from negative film at very short notice without the use of a darkroom. It is virtually untearable, has good stability, is an inexpensive medium, and negative microfilm can

be transferred to Kalfacards. A description of the process and equipment is given.

DOCUMENTATION RESEARCH

27. Aims and objectives for research into information services.

C. W. Hanson. ASLIB PROC. 10(12): 302-304 Dec. 1958.

Some problems amenable to research are: 1) size of staff for information work, 2) type of staff to employ on information work, 3) time and cost of a number of operations, 4) circumstances in which it is economical to build up one's own subject card index, 5) number of queries adequately answered from the library's own resources.

28. Current research and development in scientific documentation No. 3.

Washington, D. C., Science Information Service, National Science Foundation, 1958. 76 p. \$3.00.

This is the 3rd of a series of descriptive reports bringing up to date current research and development in the field of scientific documentation. The 55 reports are classified under 5 subject headings: Information requirements and uses; research on information storage and retrieval; mechanical translation; equipment development; miscellaneous. An author index and subject guide are provided.

29. Documentation in the chemical industry.

E. Auer. CHIMIA 12(6):165-174 June 1958.

The importance of patents as a source of information is discussed as well as reports of new patents on microcards and abstracts. The International Decimal Classification and several retrieval systems are described.

30. Documentation research and Aslib.

C. W. Cleverdon. ASLIB PROC. 10 (12): 304-307 Dec. 1958.

Views on how research work in documentation can be done by and through Aslib or with its active co-operation.

31. Studies and surveys in progress.

M. Sanner. LIB. RESOURCES & TECH. SERV. 3(1):54-58 Winter 1959.

This list of a dozen studies inaugurates what may be a continuous bibliography of projects undertaken in library schools, by organizations, by individual libraries and librarians in the fields of resources and technical processes.

INFORMATION STORAGE AND RETRIEVAL

32. Bibliography on the mechanization of information retrieval.

C. B. Bourne. Menlo Park, Calif., Stanford Research Institute, 1958. 22 p.

A bibliography of 358 references focuses attention on the techniques of electrical and mechanical mechanization with some attention paid to the auxiliary problems of coding, input-output, and mechanical translation.

33. An investigation into the comparative efficiency of information retrieval systems.

C. Cleverdon. UNESCO BUL. LIB. 12(11-12):267-270 Nov.-Dec. 1958.

A report of the investigation into the comparative ef-

efficiency of systems of information retrieval undertaken with a grant to Aslib by National Science Foundation, involving the indexing of 18,000 research reports and periodical articles under controlled conditions in the field of aeronautical engineering, indexing done by four different systems.

Add — Documentation Digest (3)

34. Machines and documentation.

H. Coblans. DISCOVERY 19:276-281 July 1958.

Machines are at their best when a large number of matching processes have to be carried out at great speed. Efficient automatic or semi-automatic systems are available for selection in narrow, highly-specialized subjects.

35. A manual for coding steroids.

J. Frome and J. Leibowitz. Patent Office Research and Development Reports No. 11. Washington, D. C., U. S. Patent Office, 1958. 20 p.

The system is limited to the steroid art. The manual describes the general coding principles, numbering system for the nucleus, organizational arrangement of terms, definitions of descriptors, coding procedure, and punched card format.

36. The mechanization of literature searching.

Y. Bar-Hillel. Paper 4-8 presented at a Symposium on the Mechanization of Thought Process, Teddington, Middlesex, 1958. 12 p.

The inefficiencies in the consultation of the relevant literature are described. Recent proposals to mechanize parts of the literature search process are discussed. The author rejects as impractical the mechanization of abstracting and indexing, but complete automatic machine translation is likely.

37. Mechanized searching experiments using the WRU searching selector.

J. Reese and A. Kent. AM. DOC. 9(4): 277-303 Oct. 1958.

This report presents the results of test searches conducted on the experimental Western Reserve University Searching Selector on a file of encoded abstracts prepared for the American Society for Metals. Seventeen case studies of satisfactory searches are presented giving for each the search request, copies of abstracts selected by the machine, notes on analysis as to the formulation of questions for machine searching programs.

38. Patent classification.

M. R. G. de Bray. ASLIB PROC. 10(12): 316-319 Dec. 1958.

Relates how classification of patents is done at the Patent Office using one card for each specification and clipping for combinations of features. The author takes a dim view of mechanization.

39. Punched cards: Their application to science and industry.

R. S. Casey et al. N. Y., Reinhold, 1958. 2nd ed. 697 p. \$15.00.

The second edition of this book has been considerably revised because of the rapid development of new methods in the field of documentation since the publication of the first edition. The book is unique in that it is an advanced handbook for the specialist as well as a manual for the general librarian, with the three-fold purpose of stating the principles and methods of the punched-card technique, their practical application to the problems of indexing and correlating the

factual data in laboratory or office files, and descriptions of commercially available equipment and cards. The arrangement presents an introductory survey in Part I; practical applications in Part II with emphasis on subject matter analysis and such unique systems as Peek-a-Boo, Uniterm, and Zato-coding; specific matters as coding and systems design in Part III. The final papers in Part IV point up the possibilities of the future for mechanized documentation. The book closes with an annotated bibliography of 400 references starting with item 277 following the last item in the bibliography in the first edition.

40. Some statistical sampling concepts applied to the information retrieval process of documentation systems.

H. M. Wadsworth and R. B. Booth. Center for Documentation and Communication Research, Cleveland, Ohio, 1958. 36 p. (AFOSR TN58-765, Technical Note No. 4)

"Statistical sampling theory is used to develop formulas which express the probability of retrieval of any desired number of pertinent entries in a documentation system. The use of the hypergeometric and binomial distributions is shown along with approximate methods using the normal and Poisson distribution."

41. Storage and retrieval of contents of technical literature, nonchemical information. 2nd supplementary report.

S. M. Newman. Patent Office Research and Development Reports No. 12. Washington, D. C., U. S. Patent Office, 1958. 16 p.

A metalanguage called Ruly English was created to convert the many complex and interrelated notions in technical documents into single unique forms. The basic elements of Ruly English are described. Two appendices are provided: one a list of roots, modulators and interrelational concepts; the second, a list of subsumed-inclusive relations.

42. Superimposed punched cards as a means of reference to periodicals.

UNESCO BUL. LIB. 12(10):228-229 Oct. 1958.

The system used by the Scientific and Technical Documentation Division of the National Research Centre of Egypt of superimposed punched cards for a collection of reviews containing 1,500 titles requires no machines.

43. A system of retrieval of compounds, compositions, processes, and polymers.

J. Frome et al. Patent Office Research and Development Reports No. 13, Washington, D. C., U. S. Patent Office, 1958. 14 p.

The paper is a general discussion of the logic developed by the Patent Office in its approach to the problem of a mechanized search system for patent searching. Two machine applications of such logic: use of "ilas" punched card machine and use of the Bendix Computer are described.

44. The "L'unite" documentation system.

T. W. te Nuyl. REV. DOC. 25(3):65-73 Aug. 1958.

A mechanized system for storing and retrieving information developed in the Patent Department of the Royal Dutch Shell Group, the Hague, Holland.

45. Variable scope patent searching by an inverted file technique.

J. Leibowitz, J. Frome and D. D. Andrews. Patent Office, Research and Development, Reports No. 14. Washington, D. C., U. S. Patent Office, 1958. 11 p.

An experiment is described in mechanized searching of patent literature comprising the chemical polymer group employing the technique of coordinated or inverted file system for the coded information abstracted from the patent. Features involved in the search system are described.

LIBRARY ADMINISTRATION

46. **Efficiency and cost of literature searching in a small documentation center in industry.**

NACHR. DOK. 9(3):145-149 Sept. 1958.

Costs are compared for manual and mechanized systems.

47. **Library lighting standards.**

L. W. White. WILSON LIB. BUL. 33(4): 297-300 Dec. 1958.

A survey of the literature on library lighting standards citing 27 references.

48. **Time study of a technical literature department.**

L. Kofnovec. DOKUMENTATION 5(2): 34-38 April 1958.

LIBRARY EDUCATION AND TRAINING

49. **The case method in library education.**

K. R. Shaffer. COLL. & RES. LIB. 19(6): 487-490 Nov. 1958.

An account of how Simmons' School of Library Science applied the case method to instruction in the area of library administration.

50. **Graduate theses accepted by library schools in the United States, 1957-58.**

L. Carnovsky. LIB. Q. 29(1):48-54 Jan. 1959.

Seventeen library schools report 160 theses. Areas of interest to S-T-M librarians are technical processes, abstracting, classification, use of information, and science-technology libraries.

LIBRARY ASSOCIATIONS AND SOCIETIES

51. **List of special library associations.**

UNESCO BUL. LIB. 12(11-12):294-296 Nov.-Dec. 1958.

Aims, membership and activities of special library associations of Germany, India, Japan, Netherlands, Norway, Scandinavia, Sweden, Great Britain, and the United States are outlined.

SPECIAL LIBRARIES AND INFORMATION SERVICES

52. **Annual report 1958 Office of Scientific Information, To the Director, National Science Foundation.**

Washington, 1958. 81 p.

A summary of 1958 accomplishments is presented and the program objectives and activities of scientific documentation, government research information, and foreign science information are reported. Appendix A lists grants and contract funds expended.

53. **"Futures" in international meetings.**

K. O. Murra. COLL. & RES. LIB. 19(6): 445-450 Nov. 1958.

There are 4 categories of reference material which provide information on future international meetings and fairs. These are 1) a small group of conventional-type reference books, 2) a large current serial collection including official documents, 3) a large body of ephemeral materials, and 4) correspondence. Some of the interesting facets of recording, obtaining and processing this information in the International Organization Section of the General Reference and Bibliography Division of the Library of Congress is sketched.

54. **Information research.**

R. S. Rose. RESEARCH MANAGEMENT 1(1):55-64 June 1958.

The organization and services of the Information Research Section at Atlas Powder Co. are described.

55. **Information service in libraries.**

D. J. Foskett. London, Crosby Lockwood, 1958. 142 p. 13s6d.

The eleven chapters into which this little book is divided deal broadly with the activities of the librarian in a special library with emphasis on science and technology. A lucid account of the remarkable rise and growth of information services and the role that the librarian plays introduces the work. An entire chapter is concerned with the appropriate training and qualifications of the information officer. The remaining chapters cover every aspect of information work with the exception of public relations and editing and writing. In a chapter on selection and acquisition, the sources of current information are reviewed and the ways of obtaining various types of documents are indicated. The best chapters are those on arrangement and indexing and reports and correspondence, where the latest trends are discussed. The important services of dissemination of information and reference work are considered in principle and detail. Other services such as translation, documentary reproduction, and microfilm are treated briefly in another chapter.

56. **A plan for a documentation center in industry.**

O. Porello. Torino Universita, Facolta di Economia e Commercio, 1958. 241 p.

Thesis on documentation in industry in two parts. The first part develops the concepts of information and documentation and analyzes existing documentation services. Part two elaborates a plan for a documentation center: organization, personnel, rules of work, equipment and installation, economic aspects, etc. (Italian)

57. **Science-technology libraries in industry: a bibliography.**

M. Tashima. M. S. Thesis, Western Reserve University, School of Library Science, Cleveland, Ohio, 1958.

58. **Some notes on the organization of special libraries.**

H. Coblans. UNESCO BUL. LIB. 12(11-12):261-266 Nov.-Dec. 1958.

The information service must be a sort of clearing house to which the whole staff of an organization turns for help in standardization, terminology, translation and bibliographical techniques.

59. **The technical reports program of the Technology Division of the Office of Technical Services.**

J. Weber. AM. DOC. 9(4):308-311 Oct. 1958.

A concise review of the history and operations of OTS is presented.

60. Working smarter with government statistics.

H. F. Zeman. SLA BUS. & FIN. DIV. BUL. 1(2):1-6 Dec. 1958.

There are two considerations to keep in mind when working with government statistics: acquisition and contact with the source of the data.

TECHNICAL PROCESSES

61. Collecting scientific and technical publications at the Library of Congress.

L. C. Coffin. COLL. & RES. LIB. 19(6): 474-478, 495 Nov. 1958.

All materials in science and technology are acquired by exchange, gift, transfer, purchase, and copyright deposit. To make its receipts of materials known, the L. C. publishes monographs, printed catalog cards, and several periodicals which are described.

62. Library binding specifications.

M. Kavin. SLA S. CALIF. CHAP. BUL. Vol. 19, No. 2, Feb. 1958, 3 p.

Specifications for binding books and magazines compiled by the Library Binding Institute and designated as TS-5329 by the Department of Commerce are compared with A.L.A.'s "Minimum specifications for Class "A" library binding," changes noted, and comments added by a representative of the Kater-Crafts Bookbinders.

63. Pictorial manual of bookbinding.

M. Banister. N. Y., Ronald Press, 1958. 40 p. \$3.75.

A how-to-do-it book for the hand bookbinder. The 200 illustrations show the operations for each of six different styles or methods of binding books, manuscripts, and magazines. Information on repairing and rebinding books is also included.

64. The Russian exchange program at Columbia University.

K. Maichel. LIB. RESOURCES & TECH. SERV. 2(4):254-258 Fall 1958.

The paper is a review of the Columbia University Libraries' Soviet exchange program for the past two years with the aim of providing information on this important source of Slavic material to libraries not having exchange relations with Soviet libraries, and of offering new information to those libraries already participating in a program.

65. Streamlining binding policy by use of edge notched cards.

J. Linders. TID. DOK. 14(5):64-65 1958.

The planning of the binding of 4000 periodical titles in the Library of the Royal Institute of Technology, Stockholm, is facilitated by using edge notched cards—these are notched for binding type, delivery and return of each volume, and for periodicals in great demand which must be bound during vacation period. (Swedish)

66. A study on long term periodical subscriptions.

J. W. Barry. LIB. RESOURCES & TECH. SERV. 3(1):50-54 Winter 1959.

This study indicates that a long term subscription program can reduce substantially the costs of administrative and clerical operations in the total library budget.

67. Use of serial shelving numbers in the National Library of Medicine.

E. R. Hasting. LIB. RESOURCES &

TECH. SERV. 3(1):62-63 Winter 1959.

The numbered arrangement of medical serial publications in the NLM is explained. The basic plan of numbering is simple (Cutter fashion) using the first two letters of the entry and the numbers 101-999 except when there are more than 500 entries using the same two letter combination — then two to five numbers (11-99999) may be used. Examples demonstrate the actual application of the scheme.

68. The use of A7 standard size library cards.

J. H. S. Van Vollenhoven. UNESCO BUL. LIB. 13(1):8-10 Jan. 1959.

The international library card size, 3x5 inches, presents certain difficulties and several documentation services in Europe are using a card size 3x4 1/8 inches. When it is desired to duplicate these cards, 8 cards of A-7 size can be cut from one sheet, master or stencil and production is possible on any office machine or duplicator, making it unnecessary to have a large carriage typewriter to take the sheet in a sideways position.

TECHNICAL WRITING AND EDITING

69. Bibliography of technical writing. 2nd ed. 1945-1957

R. Shank, compiler and editor. New York, Society Technical Writers & Editors, 1958. 67 p.

This official bibliography of STWE lists 958 items covering 33 topics for the writer and editor. A brief essay on library resources designed to act as a guide to the technical writer introduces the bibliography.

70. Today accuracy demands the first person.

E. Cortelyou. CHEM. ENG. 65(22):147-148 Nov. 3, 1958.

Explains why the use of the first person in technical writing is not a question of style but rather one of accuracy.

TRANSLATION

71. The linguistic profession (Die Fremdsprachenberufe).

A. Lane. Munchen, Isar Verlag, 1958. 206 p. DM12,80.

The author outlines the prerequisites for professional practice and the aids and methods employed in linguistic work. The book was intended for the German public but it is also valuable to others for comparison. The first 4 chapters furnish general information on the organization of the linguistic profession in the German Federal Republic including a list of the names and addresses of translator's associations in other countries. The provision for language training is described and the relevant literature is cited and commented upon. The remaining 3 chapters deal with the interpreter and translator, the language teacher, and rates of payment and the related German law including copyright.

72. The organization and work of the National Coal Board translation section.

A. G. Readett. BABEL 4(3):160-165 Sept. 1958.

Deals with the difficulties that beset a technical translation service and the prerequisites of an efficient service. Illustrations are given with numerous practical examples.

73. Research methodology for machine translation.

H. P. Edmundson and D. G. Hays. MECH. TRANS. 5(1):8-15 July 1958.

The Rand Corporation's methodology is a system for preparing Russian scientific text on punched cards, for producing translation in analyzable form, and for exposing the relationships between the original and translated versions in such a way that translation can be programmed. Text preparation, glossary development, translation, and analysis are described.

- 74. Tigres and Euphrates — a comparison between human and machine translation.**
R. H. Richens. Paper 2-4 presented at a Symposium on the Mechanization of Thought Process, Teddington, Middlesex, 1958. 24 p.

The author attempts to compare human translation and mechanical translation in as far as they are operations which convert one set of symbols into another.

- 75. Translations of Soviet scientific publications in the United States.**
R. Liepina. D. C. LIB. 29(4):62-64 Oct. 1958.

The translation efforts in the United States — conveying Russian information into English — fall into six groups: 1) translated tables of contents, 2) abstracts of Soviet scientific publications, 3) translated scientific papers, 4) translations of Soviet scientific journals, 5) translations of treatises and monographs, 6) scientific reviews. Bibliographical tools to disclose information on foreign scientific research available in English translation are mentioned and special depositories of translations are listed.

USE OF INFORMATION

- 76. Citation study to determine importance and obsolescence of electrical engineering journals.**

J. M. Casten. M. S. Thesis, Western Reserve University, School of Library Science, 1958.

- 77. An evaluation of use studies of scientific information.**

M. Taube. Washington, Documentation, Inc., 1958. 23 p. (AFOSR TN58-1050.).

An evaluation of the total existing literature of use studies is attempted. It is concluded that the reasons for the failure of use studies is that the value of the organization and dissemination of scientific information cannot be measured by consumer response, and that such responses cannot supply directions for the design of more effective information and reference systems.

- 78. Report literature used by aerodynamicists**
C. W. J. Wilson. ASLIB PROC. 10(8): 194-200 Aug. 1958.

The research reports on loan to aerodynamicists at the Royal Aircraft Establishment have been analyzed and the results indicate that American reports are of importance to this specialist group and that the group is primarily interested in very recent material. The implications of these findings relating to availability of reports, weeding of stocks, design of information retrieval systems, and the period to be covered in the compilation of bibliographies or in literature searches are discussed.

- 79. Research, problem solving and the use of technical information in small and medium sized manufacturing firms.**

S. Herner. Washington, D. C., O.T.S.,

28 p. PB131578. \$75

The study indicated that the assistance of material and equipment suppliers is second only to in-plant experiments and tests in solving the small manufacturer's problems in processes and equipment, new product development, quality control and product maintenance, raw materials and finished components, and product improvement.

- 80. Technical information and the smaller firm — facts and figures on practices in European and American Industry.**
Paris, European Productivity Agency, O.E.E.C., 1958. 350 frs.

This is the international report on the survey on the use and need for technical information in small and medium-sized firms, which was made in 1956 in six European countries and the U. S. by interviewing over 2,000 firms. Statistics indicate the use made of the various sources of technical information and the role played by management in its attitude towards technical information.

50th ANNIVERSARY

At this moment you may be asking yourself, "What can I do to promote the 50th Anniversary observance of the Special Libraries Association?" If you do not have the answer, here are some suggestions.

1. Get and use 50th Anniversary seals on your correspondence, bulletins, etc. (\$.60/C; \$.60/M from SLA headquarters).

2. Promote an article in your Company house organ.

3. If you have a contact with a writer or editor of a trade periodical, let your Section Chairman know. It may be utilized for submission of an SLA 50th Anniversary article. Tie this into National Library Week for a double-barreled approach.

4. Prepare an exhibit using the 50th Anniversary theme for your library, Company lobby, local store window or join other librarians in your city to do it. This might be tied into National Library Week.

5. Accept any opportunity to speak before other library groups, civic and service organizations, technical and professional societies and library schools. During that talk plug for our 50th Anniversary.

6. Wiggle into radio or TV shows and tell about the 50th Anniversary. National Library Week is a natural opportunity.

7. In the local newspapers play up our SLA President's visit to your Chapter during this 50th Anniversary year.

8. In mid-May tell the newspapers about the local special librarians who will attend this most significant 50th Anniversary Convention.

The last three suggestions can be promoted best by your Chapter Publicity Chairman. Be sure they do it.

If your spirit is willing but you lack in-

formation, remember we **HAVE INFORMATION, WILL SEND!**

Paul Knapp, Librarian
The Ohio Oil Company
Research Center Library
P. O. Box 269
Littleton, Colo.

SCI-TECH NOMINATING COMMITTEE REPORT

R. C. Gremling, Chairman of the Science-Technology Nominating Committee, reports the following slate for the 1959/60 Sci-Tech election.

Chairman: C. K. Bauer
Vice Chairman and Chairman Elect:
H. S. White
A. G. Skelton

Secretary (2 year term):
Mrs. Doris H. Banks
Mrs. Betty B. Bateman

Treasurer: No election this year

SUBSCRIPTION CAMPAIGN

Sci-Tech News is available to librarians who are not members of the Science-Technology Division on subscription at \$1.00 per year. It is sent as a dues dividend to Sci-Tech members but we believe its value and interest is not limited to Division members.

If you concur in this evaluation, show your librarian friends a copy and suggest to them that they send a dollar check made out to the Science-Technology Division to the editor. We will add them to our circulation list.

Should you be a trifle hesitant to engage in direct selling, send us the names of any librarians you think might be interested in Sci-Tech News and we will send them a sample copy with an invitation to subscribe.

POST CONVENTION SESSION ON INTERNATIONAL COOPERATION AND DOCUMENTATION

Documentation is an activity which is not solely the province of the American librarian or information officer. Contributors to the field would form an international Who's Who in contemporary librarianship. Cognizant of this, C. K. Bauer, incoming Chairman of the Science-Technology Division laid plans for a post convention session for the 50th Anniversary SLA convention which would emphasize the international aspects of documentation.

On Thursday, June 4, at Atlantic City, those who are interested in the librarianship

of near-print materials may attend the session on **INTERNATIONAL COOPERATION IN DOCUMENTATION**, a session jointly sponsored by the Science-Technology Division, the Documentation Division, the Metals Division and the Military Librarians Division. The meeting will be held in the Chalfonte-Hadden Hall, the convention hotel.

During the morning, the representatives of foreign governments stationed in Washington will discuss the information services available in their countries and the availability of these services and the documents with which the services are concerned to American librarians. Invitations have been issued to Canada, Britain, Holland, France, West Germany, Argentina and Brazil. C. K. Bauer will serve as the chairman of the morning session.

Representatives of American and international organizations concerned with supplying information on information services to non-American organizations will talk during the afternoon session of which I. A. Warheit will be chairman.

Dr Raymond L. Zwimmer of the State Department will cover the State Departments scientific attache program pertaining to the release of U. S. produced information and the acquisition of foreign scientific information.

H. C. Campbell will describe UNESCO's function and responsibility in the scientific information area.

The Library of Congress' Gift and Exchange Division and its function of service to non-American recipients will be the subject of Lewis C. Coffin's presentation.

John Green will present the OTS foreign exchange program and Mel Day will cover the work of the U. S. Atomic Energy Commission.

ASTIA's role in the AGARD program will be described by either Col. Dunlop or by Jack Stearns, his deputy. The representative of the Office of Scientific Information, National Science Foundation (Dr. Burton W. Atkinson or Bernard Fry) will conclude the afternoon session by discussing the function of this new organization.

This post-convention session, in which an entire day will be devoted completely to the subject of International Cooperation in Documentation should prove the most valuable day for many who attend the 50th Anniversary Conference.

There will be no registration fee nor are advanced reservations required. The session will be open to all who are interested at no cost.

HIGHLIGHTS OF THE SCI-TECH ADVISORY COMMITTEE

Twice a year the Sci-Tech Officers, Committee Chairmen, Section, Chapter and publication representatives meet to discuss and plan the Division activities. The summer meeting is held during the annual convention. The winter meeting is conducted at the close of SLA's Advisory Committee meeting. This year the conclave was held on Saturday, February 7 at 9:30 AM in Highland Park's Moraine Hotel.

This unofficial report from rough notes (the formal minutes will be compiled by Charles Gottschalk of the Library of Congress) is printed for the information of the membership.

Treasurer's report: Mary Williams reports that the Division is still solvent with a balance of \$1,212.84 in the treasury. The income during the past six months was somewhat less than the expenditures inasmuch as only one allotment had been received from SLA Headquarters. The major portion of the expenditures has been for Sci-Tech News.

Constitution: Margaret Firth has found a number of changes in the By-laws desirable. These will be presented to the membership in the pre-convention issue of Sci-Tech News and again at the business meeting at the 1959 convention. These amendments will then be sent to the membership for a mail vote.

Exchange: Herb White's report stated that there were now 70 participating libraries in the exchange program. During the past six months the activity had picked up 16 members and lost 11.

Nominations: Gremling's report is printed elsewhere in this issue.

Scientific Meetings: Joan Hutchinson reported 391 paid-up subscriptions for 1959 and a \$1,700 balance in the checking account. (This makes Scientific Meetings more affluent than the Division treasury if these notes are correct.)

Sci-Tech News: The mail vote of the Advisory Committee resulted in reducing the subscription price to \$1.00. In response to the question of how much duplication existed between the content of the sustaining features of S-TN and other library publications, Gordon Randall volunteered to make a study and report on it at the next meeting. He also proposed that consideration be given to carrying advertising in the 1960 issues.

Union List: The fate of the Union List has not yet been determined and Lois Brock will appoint a committee for that purpose.

Membership: Carl Losse said that dropping the institutional membership class had resulted in a small loss of membership which now stands at 2,040. He anticipates a further decline in March.

Convention Program: The short program for the 50th Anniversary Convention made it difficult to schedule Division meetings. The tentative schedule for Sci-Tech affairs is as follows:

Monday, June 1, Afternoon: Joint meeting with Documentation and Metals Division on "What's New in Microreproduction." Robert Bray and I. A. Warheit will moderate the sessions.

Dinner: Pharmaceutical, Public Utilities and Chemistry Sections dinner and business meetings.

Evening: Division Open House, Dutch treat.

Tuesday, June 2. Section business meetings may be held until 10:30. Sci-Tech members will participate in a session in "Work Standards and Work Performance" from 10:30-12:00 and on "Work Measurements" from 2:00-3:30. The business meeting will be conducted from 3:30-5:00.

Wednesday, June 3, 12:00-2:30 Sci-Tech Advisory Committee luncheon and meeting.

Thursday, June 4. Post convention session on "International Co-operation in Documentation". This is covered elsewhere in this issue.

Those attending the Advisory Committee meeting were: L. Brock, Chairman; C. K. Bauer, Vice-chairman; C. M. Gottschalk, Secretary; M. Williams, Treasurer; M. Firth, Constitution; C. Loose, Membership; J. Hutchinson, Scientific Meetings; A. T. Thompson, Public Utilities; F. McKenna, N. J. Chapter; M. Mitchell, Chemistry; M. Schmactenberger, N. Y. Chapter; Stella Brunn for Paul Knapp, Petroleum; Leslie B. Poland, and G. E. Randall, Sci-Tech News.

NATIONAL SCIENCE FOUNDATION

The LC Bulletins in December mentions two new activities of the National Science Foundation of interest to Sci-Tech readers. The Library of Congress has been granted \$10,000 to inventory existing scientific and technical abstracting and indexing services. With the aid of both the Council on Library Resources and the National Science Foundation, the American Institute of Biological Sciences will publish a scientific journal, WILDLIFE DISEASE, in microtext form.

SCI-TECH NEWS

AEDC Library-ABO

Tullahoma, Tennessee

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